



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
DIVISION OF MATERIALS AND TESTS
6601 CENTENNIAL BLVD.
NASHVILLE, TENNESSEE 37243-0360

Precast Inspection Checklist
Quality Audit Checklist

Date _____ Time _____

Producer _____ Location _____ Region _____

Plant Representative _____ Plant Manager _____

Plant Address _____

Phone/Email _____

Regional M&T Inspector _____ HQ M&T Inspector _____

General Information

1. Are there deficiencies noted on the last Region Inspection Report? Yes ☐ No ☐
2. Are there deficiencies noted on the last HQ Audit? Yes ☐ No ☐
3. Are there deficiencies noted on the last audit performed by certifying agency? Yes ☐ No ☐
4. Is previous precast inspection checklist readily available? Yes ☐ No ☐
5. Are deficiencies from previous audits or inspections recurring? Yes ☐ No ☐
6. ACPA / NPCA / PCI Certification (circle one) Expiration Date: _____
7. List all TDOT products made at facility (category and type):

8. Is the plant certified to produce each of these products? Yes ☐ No ☐
9. According to which of the following are products being manufactured?
 - a. TDOT Standard Drawing Yes ☐ No ☐
 - b. Approved Alternate Drawing Yes ☐ No ☐
 - c. Contract Plans Yes ☐ No ☐
 - d. ASTM/AASHTO Specifications Yes ☐ No ☐

Comments: _____

Materials

1. Check materials against approved mix design (ask for material delivery tickets):
 Cement _____ Fly Ash _____
 GGBFS _____ Chemical Admixtures _____
 Coarse Aggregate _____ Fine Aggregate _____
2. Is documentation of aggregate properties (i.e. specific gravity and absorption) readily available?
 Yes ☐ No ☐
3. Is steel used at the plant on the Producer List and mill certs readily available? Yes ☐ No ☐
4. Does the plant use drawn down wire? Yes ☐ No ☐
5. If yes, are certs readily available? Yes ☐ No ☐
6. Does Plant use municipal or non-municipal water? Municipal ☐ Non-municipal ☐
7. If non-municipal water, are test records kept on file? Yes ☐ No ☐

Comments: _____

Quality Control Program

1. Is Quality Control Manual readily available? Yes ☐ No ☐
2. Is organizational chart readily available and current? Yes ☐ No ☐
3. Main QC Inspector Name: _____
 a. TDOT/ACI Level 1 Expiration Date: _____
 b. TDOT Level 2 Expiration Date: _____
4. Backup QC Inspector Name: _____
 a. TDOT/ACI Level 1 Expiration Date: _____
 b. TDOT Level 2 Expiration Date: _____
5. Mix Design Technician Name: _____
 a. TDOT/ACI Level 1 Expiration Date: _____
 b. TDOT Level 2 Expiration Date: _____
 c. TDOT Level 3 Expiration Date (if applicable): _____
 d. PE License # & Expiration (if applicable): _____
6. Does the plant keep a record of the following tests/inspections performed by QC personnel?
 a. Pre-Pour Yes ☐ No ☐
 b. During Yes ☐ No ☐
 c. Post-Pour Yes ☐ No ☐
7. Are gradations on aggregate being performed at least once per month? Yes ☐ No ☐

Comments: _____

Laboratory Equipment

1. All lab equipment easily fits in space and is accessible.....Yes ☐ No ☐

Scoop..... <input type="checkbox"/>	4"x8" cylinder molds..... <input type="checkbox"/>
Sample reduction equipment.... <input type="checkbox"/>	Square blade shovel..... <input type="checkbox"/>
Slump cone with base..... <input type="checkbox"/>	Pan..... <input type="checkbox"/>
Tamping rod..... <input type="checkbox"/>	Thermometers..... <input type="checkbox"/>
Air meter with case..... <input type="checkbox"/>	Wheelbarrow..... <input type="checkbox"/>
2. Space is floored, roofed, sealed inside, weather-tight, and furnished with electricity.....Yes ☐ No ☐
3. Laboratory equipped with heat source capable of maintaining a temperature of 230°F +/- 9°F?.....
 - a. Oven..... ☐
 - b. Stovetop..... ☐
 - c. Hot Plate..... ☐
4. Appropriate lights, electrical outlets, and HVAC is provided for tests being performed..Yes ☐ No ☐
5. Scales (2 kg capacity, 0.2% sensitivity, 0.5% accuracy) available.....Yes ☐ No ☐
6. Scales (100 lbs capacity, 0.2% sensitivity, 0.5% accuracy) available.....Yes ☐ No ☐
7. Appropriate size and mesh screens are available to perform gradations.....Yes ☐ No ☐

Coarse Series

- 2" ☐
- 1 1/2" ☐
- 1" ☐
- 3/4" ☐
- 1/2" ☐
- 3/8" ☐
- #4 ☐
- #8 ☐
- Tray ☐

Fine Series

- 3/8" ☐
- #4 ☐
- #8 ☐
- #16 ☐
- #30 ☐
- #50 ☐
- #100 ☐
- #200 ☐
- Pan ☐

8. Mechanical shaker (Coarse Aggregate).....Yes ☐ No ☐
9. Mechanical shaker (Fine Aggregate).....Yes ☐ No ☐
10. Adequate and suitable water supply is available to perform wash tests in accordance with AASHTO T-11, if necessary.....Yes ☐ No ☐

Comments: _____

Testing Equipment

1. Is facility certifying products for acceptance? Yes ☐ No ☐
2. If yes, has the following equipment been calibrated within the last 12 months?
 - a. Compression Machine Yes ☐ No ☐
 - i. Date Calibrated: _____
 - b. Three-Edge Bearing Yes ☐ No ☐
 - i. Date Calibrated: _____

Comments: _____

Concrete Batching/Central Mixing Plant

1. If facility batches its own concrete,
 - a. Have the scales, weighing devices, and/or metering devices been calibrated within the last 6 months? Yes ☐ No ☐
 - i. Date(s) Calibrated: _____
 - b. Chemical admixture dispensers calibrated within the last 12 months? Yes ☐ No ☐
 - i. Date Calibrated: _____
 - c. If using aggregate moisture probes, is accuracy verified with AASTHO T-255 weekly?
..... Yes ☐ No ☐
 - d. Stockpile maintenance
 - Labeled Yes ☐ No ☐
 - Overflowing Yes ☐ No ☐
 - Partitions Yes ☐ No ☐
 - Coned Yes ☐ No ☐
 - Segregated Yes ☐ No ☐
 - Blending Yes ☐ No ☐
2. If using concrete from RM plant, expiration date of NRMCA certification: _____

Comments: _____

Mix Design

1. Are all products used in approved mix design still on Producer List or QPL?
 - a. Cement Yes ☐ No ☐
 - b. Fly Ash Yes ☐ No ☐
 - c. GGBFS Yes ☐ No ☐
 - d. Admixtures Yes ☐ No ☐
 - e. Coarse Aggregate Yes ☐ No ☐
 - f. Fine Aggregate Yes ☐ No ☐
2. Is there a mix design for each type of product being produced? Yes ☐ No ☐

Acceptance Testing

1. Are the following acceptance tests being performed at minimum frequencies listed in SOP 5-3?
 - a. Compressive Strength Yes ☐ No ☐
 - b. Absorption Yes ☐ No ☐
 - c. D-Load Yes ☐ No ☐
 - d. Ultimate Load Yes ☐ No ☐
2. Are daily reports documenting type/quantity of product made each day available? Yes ☐ No ☐
 - a. Do daily reports contain all acceptance test results? Yes ☐ No ☐
 - b. Do daily reports contain inspection of dimensional tolerances? Yes ☐ No ☐
3. Are acceptable products marked by stamp, etch, or label? Yes ☐ No ☐

Category 1 & 2

Date of Manufacture ☐

AASHTO/ASTM Designation/Class ☐

TDOT Standard Drawing # ☐

Approved Alternate Drawing # ☐

Project/Contract # ☐

Plant's Unique Stamp ☐

NPCA/ACPA/PCI Stamp ☐

Category 3

Date of Manufacture ☐

Diameter ☐

AASHTO/ASTM Designation/Class ☐

Plant's Unique Stamp ☐

NPCA/ACPA/PCI Stamp ☐

Comments: _____

Date _____ Time _____

Producer _____ Location _____ Region _____

Plant Representative _____ Plant Manager _____

Plant Address _____

Phone/Email _____

Regional M&T Inspector _____ HQ M&T Inspector _____

Discussion of Findings

Discuss summary of findings with plant representative.

1.

2.

3.

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10.

TDOT Auditor Signature _____

Plant Representative Signature _____